

SMK Expands Product Lineup of FAKRA Connector: Waterproof Cable Jack with 35% Lower Profile



SMK has expanded its standard product lineup of automotive FAKRA connectors by adding a right-angle low profile type waterproof cable jack. This product has achieved about a 35% reduction in height (from 22.9 mm to 15.0 mm) compared to SMK's conventional product.

In recent years, the number of cameras and antennas equipped in cars has been increasing along with the advancement of safety features, the progress in self-driving technology, and the expansion of communication functions (spread of connected cars). Against this backdrop, the demand for FAKRA connectors to connect these devices has been growing worldwide, particularly in Europe, the United States, and Japan. At the same time, as the number of automotive devices in a car increases, they need to be lighter, easier to wire, and mounted in a smaller space, which requires connectors to be even smaller and lower in height.

To meet these demands, SMK has developed a FAKRA connector with an approximately 35% lower profile than the conventional product. It has high waterproof performance in accordance with IPX7 and IPX9K, improved from the conventional product that complies only with IPX7. Furthermore, the frequency range has been expanded to 6GHz from 4GHz in the conventional product, providing an excellent high-frequency performance.

[Applications]

Automotive Devices (cameras, antennas, etc.)

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Product Name	Waterproof FAKRA Cable Jack (Right-Angle Low Profile Type) Part Number: CZF2100-02XXF (cable outlet direction: 3 o'clock) CZF2100-03XXF (cable outlet direction: 9 o'clock)	
Features	<ol style="list-style-type: none"> 1) FAKRA-compliant. 2) Low profile. (Product height is approx. 35% lower than the SMK's conventional product.) 3) Two cable outlet directions are available: 3 and 9 o'clock. 4) Excellent waterproof performance. (IPX7, IPX9K) 5) Excellent high-frequency performance. (Supports frequency range up to 6GHz.) 	
Major Specifications	Rated Voltage / Current	60V / 1A
	Operating Temperature Range	-40°C to +105°C
	Frequency Impedance	DC to 6GHz
	Nominal Impedance	50Ω
	VSWR	DC to 2GHz: 1.4 maximum 2 to 3GHz: 1.5 maximum 3 to 6GHz: 1.6 maximum
	Insertion Loss	DC to 3GHz: 0.3dB maximum 3 to 6GHz: 0.45dB maximum
	Applicable Cable	1.5D coaxial cable
	Standard	ISO20860-1/-2, DIN72594-1/-2, USCAR-17/-18
	External Dimensions	11 mm (W) × 14.65 mm (D) × 15 mm (H)
	Operating Life	30 cycles



Start Taking Orders From	November 2021
Goes Into Mass Production From	January 2022
Sample Price	Depends on specifications of cables.
Inquiry	For more information, please contact CS Division